FILE 'USPAT' ENTERED AT 16:23:34 ON 13 MAY 1999

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* U. S. PATENT TEXT FILE *

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* THE WEEKLY PATENT TEXT AND IMAGE DATA IS CURRENT *

* THROUGH May 11, 1999.

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=> s estrogen?(5a)receptor?

	4724	ESTROGEN?
	38183	RECEPTOR?
L1	934	ESTROGEN?(5A)RECEPTOR?

=> s l1 and chimer?

	5383	CHIMER?
L2	131	L1 AND CHIMER?

=> s l2 and orphan?

	377	ORPHAN?
L3	24	L2 AND ORPHAN?

=> d 1-24

1. 5,891,700, Apr. 6, 1999, Receptor-type phosphotyrosine phosphatase-.gamma.; Joseph Schlessinger, 435/196 [IMAGE AVAILABLE]

2. 5,877,207, Mar. 2, 1999, Synthesis and use of retinoid compounds having negative hormone and/or antagonist activities; Elliott S. Klein, et al., 514/456; 549/405 [IMAGE AVAILABLE]

3. 5,876,951, Mar. 2, 1999, Yeast cells engineered to produce pheromone system protein surrogates and uses therefor; Dana M. Fowlkes, et al., 435/7.31, 254.11, 254.2, 254.21 [IMAGE AVAILABLE]

4. 5,874,534, Feb. 23, 1999, Mutated steroid hormone receptors, methods for their use and molecular switch for gene therapy; Elisabetta Vegeto, et al., 530/350; 536/23.1, 24.1 [IMAGE AVAILABLE]

5. 5,849,485, Dec. 15, 1998, Liver enriched transcription factor; Frances M. Sladek, et al., 435/6; 536/24.1 [IMAGE AVAILABLE]

6. 5,834,213, Nov. 10, 1998, Screening system and assay for identifying compounds that regulate steroid and **orphan** receptors mediation of DNA transcription; Bert W. O'Malley, et al., 435/7.8, 6, 7.2, 69.1, 320.1; 536/23.1 [IMAGE AVAILABLE]

7. 5,789,184, Aug. 4, 1998, Yeast cells engineered to produce pheromone system protein surrogates, and uses therefor; Dana M. Fowlkes, et al., 435/7.31, 254.11, 254.2, 254.21 [IMAGE AVAILABLE]

8. 5,786,362, Jul. 28, 1998, Method of treating Hormone independent cancer; Arnon Krongrad, 514/280 [IMAGE AVAILABLE]

9. 5,776,699, Jul. 7, 1998, Method of identifying negative hormone and/or antagonist activities; Elliott S. Klein, et al., 435/7.2, 7.1, 69.1, 320.1, 325 [IMAGE AVAILABLE]

10. 5,756,448, May 26, 1998, Constitute activator of retinoid (CAR) receptor polypeptides; David D. Moore, et al., 514/2; 435/69.1; 530/350 [IMAGE AVAILABLE]

11. 5,710,017, Jan. 20, 1998, DNA encoding a constitutive activator retinoic acid response (CAR) receptor; David D. Moore, et al., 435/69.1, 320.1, 325; 536/23.5 [IMAGE AVAILABLE]

12. 5,710,004, Jan. 20, 1998, Methods of using novel steroid hormone **orphan** receptors; Ronald M. Evans, et al., 435/6, 69.1, 69.4, 69.7, 320.1, 325; 530/350; 536/23.1 [IMAGE AVAILABLE]

13. 5,707,800, Jan. 13, 1998, Retinoic acid response elements and assays employing same; David John Mangelsdorf, et al., 435/6, 7.2, 7.21, 7.8, 69.1, 320.1, 325, 349, 358, 367; 536/23.1, 24.2 [IMAGE AVAILABLE]

14. 5,696,233, Dec. 9, 1997, **Orphan** steroid hormone receptors; Ronald M. Evans, et al., 530/350, 358 [IMAGE AVAILABLE]

15. 5,686,574, Nov. 11, 1997, Constitutive activator of retinoic acid response (CAR) receptor fusion protien; David D. Moore, et al., 530/350; 435/69.1, 69.7; 536/23.4 [IMAGE AVAILABLE]

16. 5,679,518, Oct. 21, 1997, Method for finding transcription activators of the NER steroid hormone receptor; Eitan Friedman, et al., 435/6, 7.1 [IMAGE AVAILABLE]

17. 5,639,616, Jun. 17, 1997, Isolated nucleic acid encoding a ubiquitous nuclear receptor; Shutsung Liao, et al., 435/7.1, 69.1, 252.3, 320.1; 536/23.5, 24.3 [IMAGE AVAILABLE]

18. 5,607,967, Mar. 4, 1997, Treatment of alzheimer's disease with

5-(4-Octadecyl-oxy)-2-furan carboxylic acid; Eitan Friedman, et al., 514/461, 475 [IMAGE AVAILABLE]

19. 5,604,115, Feb. 18, 1997, Liver enriched transcription factor; Frances M. Sladek, et al., 435/69.1, 252.3, 254.11, 320.1, 325, 348; 536/23.5 [IMAGE AVAILABLE]

20. 5,602,009, Feb. 11, 1997, Dominant negative **chimeras** of the steroid/thyroid superfamily of receptors; Ronald M. Evans, et al., 435/69.7, 252.3, 320.1; 530/350; 536/23.4 [IMAGE AVAILABLE]

21. 5,597,698, Jan. 28, 1997, Hormone response element compositions and assay; Ronald M. Evans, et al., 435/6, 69.7; 530/330, 350 [IMAGE AVAILABLE]

22. 5,556,956, Sep. 17, 1996, Methods and compositions relating to the androgen receptor gene and uses thereof; Arun K. Roy, et al., 536/24.1, 23.1, 24.3, 24.31 [IMAGE AVAILABLE]

23. 5,538,123, Jul. 2, 1996, Receptor-type phosphotyrosine phosphatase-.gamma.; Joseph Schlessinger, 435/6, 69.1, 69.7, 70.1, 71.2, 196, 252.3, 254.2, 320.1, 357, 365; 536/23.1, 23.2 [IMAGE AVAILABLE]

24. 5,364,791, Nov. 15, 1994, Progesterone receptor having C. terminal hormone binding domain truncations; Salvatore Vegeto, et al., 435/320.1, 240; 530/350; 536/23.1 [IMAGE AVAILABLE]

and 14 Clms

US PAT NO: 5,696,232 [IMAGE AVAILABLE]
L7: 14 of 24

CLAIMS:

CLMS(1)

That which is claimed is:

1. A polypeptide characterized by having a DNA binding domain comprising about 66 amino acids with 8 Cys residues, wherein said DNA binding domain is further characterized by the following amino acid sequence identity, relative to the DNA binding domains of hRAR-alpha, hTR-beta, hGR and hRXR-alpha, respectively:
A. (i) about 63% amino acid sequence identity with the DNA binding domain of hRAR-alpha;
(ii) about 59% amino acid sequence identity with the DNA binding domain of hTR-beta;
(iii) about 45% amino acid sequence identity with the DNA binding domain of hGR; and
(iv) about 65% amino acid sequence identity with the DNA binding domain of hRXR-alpha; or
B. (i) about 55% amino acid sequence identity with the DNA binding domain of hRAR-alpha;
(ii) about 54% amino acid sequence identity with the DNA binding domain of hTR-beta;
(iii) about 50% amino acid sequence identity with the DNA binding domain of hGR; and
(iv) about 63% amino acid sequence identity with the DNA binding domain of hRXR-alpha; or
C. (i) about 61% amino acid sequence identity with the DNA binding domain of hRAR-alpha;
(ii) about 96% amino acid sequence identity with the DNA binding domain of hTR-beta;
(iii) about 44% amino acid sequence identity with the DNA binding domain of hGR; and
(iv) about 62% amino acid sequence identity with the DNA binding domain of hRXR-alpha; or
D. (i) about 58% amino acid sequence identity with the DNA binding domain of hRAR-alpha;
(ii) about 92% amino acid sequence identity with the DNA binding domain of hTR-beta;
(iii) about 44% amino acid sequence identity with the DNA binding domain of hGR; and
(iv) about 61% amino acid sequence identity with the DNA binding domain of hRXR-alpha; or
E. (i) about 59% amino acid sequence identity with the DNA binding domain of hRAR-alpha;
(ii) about 59% amino acid sequence identity with the DNA binding domain of hTR-beta;
(iii) about 50% amino acid sequence identity with the DNA binding domain of hGR; and
(iv) about 65% amino acid sequence identity with the DNA binding domain of hRXR-alpha.

CLMS(2)

2. A polypeptide according to claim 1 wherein the DNA binding domain of said polypeptide has:
(i) about 69% amino acid sequence identity with the DNA binding domain of hRAR-alpha;
(ii) about 59% amino acid sequence identity with the DNA binding domain of hTR-beta;
(iii) about 45% amino acid sequence identity with the DNA binding domain of hGR; and
(iv) about 65% amino acid sequence identity with the DNA binding domain of hRXR-alpha.

CLMS(3)

3. A polypeptide according to claim 2 wherein the ligand binding domain of said polypeptide has:
(i) about 27% amino acid sequence identity with the ligand binding

domain of hRAR-alpha;
(ii) about 58% amino acid sequence identity with the ligand binding domain of hTR-beta;
(iii) about 20% amino acid sequence identity with the ligand binding domain of hGR; and
(iv) about 22% amino acid sequence identity with the ligand binding domain of hRXR-alpha.

CLMS(4)

4. A polypeptide according to claim 3 wherein said polypeptide has an overall amino acid sequence identity of:
(i) about 32% relative to hRAR-alpha;
(ii) about 31% relative to hTR-beta;
(iii) about 10% relative to hGR; and
(iv) about 29% relative to hRXR-alpha.

CLMS(5)

5. A polypeptide according to claim 1 wherein the DNA binding domain of said polypeptide has:
(i) about 55% amino acid sequence identity with the DNA binding domain of hRAR-alpha;
(ii) about 56% amino acid sequence identity with the DNA binding domain of hTR-beta;
(iii) about 50% amino acid sequence identity with the DNA binding domain of hGR; and
(iv) about 52% amino acid sequence identity with the DNA binding domain of hRXR-alpha.

CLMS(6)

6. A polypeptide according to claim 5 wherein the ligand binding domain of said polypeptide has:
(i) about 32% amino acid sequence identity with the ligand binding domain of hRAR-alpha;
(ii) about 29% amino acid sequence identity with the ligand binding domain of hTR-beta;
(iii) about 20% amino acid sequence identity with the ligand binding domain of hGR; and
(iv) about 23% amino acid sequence identity with the ligand binding domain of hRXR-alpha.

CLMS(7)

7. A polypeptide according to claim 6 wherein said polypeptide has an overall amino acid sequence identity of:
(i) about 33% relative to hRAR-alpha;
(ii) about 31% relative to hTR-beta;
(iii) about 24% relative to hGR; and
(iv) about 27% relative to hRXR-alpha.

CLMS(8)

8. A polypeptide according to claim 1 wherein the DNA binding domain of said polypeptide has:
(i) about 62% amino acid sequence identity with the DNA binding domain of hRAR-alpha;
(ii) about 58% amino acid sequence identity with the DNA binding domain of hTR-beta;
(iii) about 48% amino acid sequence identity with the DNA binding domain of hGR; and
(iv) about 62% amino acid sequence identity with the DNA binding domain of hRXR-alpha.

CLMS(9)

9. A polypeptide according to claim 8 wherein the ligand binding domain of said polypeptide has:
(i) about 29% amino acid sequence identity with the ligand binding domain of hRAR-alpha;
(ii) about 27% amino acid sequence identity with the ligand binding domain of hTR-beta;
(iii) about 21% amino acid sequence identity with the ligand binding domain of hGR; and
(iv) about 28% amino acid sequence identity with the ligand binding domain of hRXR-alpha.

CLMS(10)

10. A polypeptide according to claim 9 wherein said polypeptide has an overall amino acid sequence identity of:
(i) about 32% relative to hRAR-alpha;
(ii) about 31% relative to hTR-beta;
(iii) about 25% relative to hGR; and
(iv) about 33% relative to hRXR-alpha.

CLMS(11)

11. A polypeptide according to claim 1 wherein the DNA binding domain of said polypeptide has:
(i) about 59% amino acid sequence identity with the DNA binding domain of hRAR-alpha;
(ii) about 52% amino acid sequence identity with the DNA binding domain of hTR-beta,
(iii) about 44% amino acid sequence identity with the DNA binding domain of hGR; and
(iv) about 61% amino acid sequence identity with the DNA binding domain of hRXR-alpha.

CLMS(12

12. A polypeptide according to claim 11 wherein the ligand binding domain of said polypeptide has:
(i) about 19% amino acid sequence identity with the ligand binding domain of hRAR-alpha;
(ii) about 27% amino acid sequence identity with the ligand binding domain of hTR-beta;
(iii) about 20% amino acid sequence identity with the ligand binding domain of hGR; and
(iv) about 27% amino acid sequence identity with the ligand binding domain of hRXR-alpha.

CLMS(13)

14. A polypeptide according to claim 13 wherein said polypeptide has an overall amino acid sequence identity of:
(i) about 27% relative to hRAR-alpha;
(ii) about 34% relative to hTR-beta;
(iii) about 20% relative to hGR; and
(iv) about 29% relative to hRXR-alpha.

CLMS(14)

14. A polypeptide according to claim 1 wherein the DNA binding domain of said polypeptide has:
(i) about 50% amino acid sequence identity with the DNA binding domain of hRAR-alpha;
(ii) about 55% amino acid sequence identity with the DNA binding domain of hTR-beta;
(iii) about 50% amino acid sequence identity with the DNA binding domain of hGR; and
(iv) about 65% amino acid sequence identity with the DNA binding domain of hRXR-alpha.

CLMS(15)

15. A polypeptide according to claim 14 wherein the ligand binding domain of said polypeptide has:
(i) about 18% amino acid sequence identity with the ligand binding domain of hRAR-alpha;
(ii) about 20% amino acid sequence identity with the ligand binding domain of hTR-beta;
(iii) about 20% amino acid sequence identity with the ligand binding domain of hGR; and
(iv) about 24% amino acid sequence identity with the ligand binding domain of hRXR-alpha.

CLMS(16)

16. A polypeptide according to claim 15 wherein said polypeptide has an overall amino acid sequence identity of:
(i) about 24% relative to hRAR-alpha;
(ii) about 28% relative to hTR-beta;
(iii) about 13% relative to hGR; and
(iv) about 33% relative to hRXR-alpha.

CLMS(17)

17. A polypeptide according to claim 1 wherein the ligand binding domain of said polypeptide is further characterized by the following amino acid sequence identity, relative to the ligand binding domains of hRAR-alpha, hTR-beta, hGR and hRXR-alpha, respectively:
A. (i) about 27% amino acid sequence identity with the ligand binding domain of hRAR-alpha;
(ii) about 30% amino acid sequence identity with the ligand binding domain of hTR-beta;
(iii) about 20amino acid sequence identity with the ligand binding domain of hGR; and
(iv) about 22% amino acid sequence identity with the ligand binding domain of hRXR-alpha; or
B. (i) about 32% amino acid sequence identity with the ligand binding domain of hRAR-alpha;
(ii) about 25% amino acid sequence identity with the ligand binding domain of hTR-beta;
(iii) about 2 % amino acid sequence identity with the ligand binding domain of hGR; and
(iv) about 23% amino acid sequence identity with the ligand binding domain of hRXR-alpha; or
C. (i) about % amino acid sequence identity with the ligand binding domain of hRAR-alpha;
(ii) about 2 % amino acid sequence identity with the ligand binding domain of hTR-beta;
(iii) about % amino acid sequence identity with the ligand binding domain of hGR, and
(iv) about 2 % amino acid sequence identity with the ligand binding domain of hRXR-alpha; or
D. i) about % amino acid sequence identity with the ligand binding domain of hRAR-alpha;
(ii) about 2 % amino acid sequence identity with the ligand binding domain of hTR-beta;
(iii) about % amino acid sequence identity with the ligand binding domain of hGR; and
(iv) about 2 % amino acid sequence identity with the ligand binding domain of hRXR-alpha; or
E. (i) about % amino acid sequence identity with the ligand binding domain of hRAR-alpha;
(ii) about 2 % amino acid sequence identity with the ligand binding domain of hTR-beta;
(iii). about % amino acid sequence identity with the ligand binding domain of hGR; and
(iv) about 2 % amino acid sequence identity with the ligand binding domain of hRXR-alpha.

CLMS(18)

18. A polypeptide according to claim 1 wherein said polypeptide has an overall amino acid sequence identity, relative to hRAR-alpha, hTR-bea, hGR and hRXR-alpha, respectively of:
A. (i) about 2% relative to hRAR-alpha;
(ii) about 3 % relative to hTR-beta;
(iii) about % relative to hGR; and
(iv) about 2 % relative to hRXR-alpha; or
B. (i) about % relative to hRAR-alpha;
(ii) about 2 % relative to hTR-beta;
(iii) about % relative to hGR; and
(iv) about relative to hRXR-alpha; or
C. (i) about relative to hRAR-alpha.
(ii) about % relative to hTR-beta;
(iii) about % relative to hGR; and
(iv) about % relative to hRXR-alpha; or
D. (i) about % relative to hRAR-alpha;
(ii) about % relative to hTR-beta;
(iii) about % relative to hGR; and
(iv) about relative to hRXR-alpha; or
E. (i) about % relative to hRAR-alpha;
(ii) about % relative to hTR-beta;

[illegible] at least [illegible] relative to hRXR; and
[illegible] at least [illegible] relative to hRXR-alpha.

CLM[1,2]

1. A polypeptide according to claim 1 wherein said polypeptide has the same amino acid sequence as polypeptides selected from SEQ ID NOS:3, 4, 9, 10, 12 or 14.

CLM[1,10]

10. A **chimeric** receptor comprising an amino-terminal domain, a DNA-binding domain, and a ligand-binding domain,
wherein at least one of the domains thereof is derived from the polypeptide of claim 1; and
wherein at least one of the domains thereof is derived from at least one previously identified member of the steroid/thyroid superfamily of receptors.

=> s 5696233/pn

L4 1 5696233/PN

=> s l1 and l4

L5 1 L1 AND L4

=> d kwic

US PAT NO: **5,696,233** [IMAGE AVAILABLE]
L5: 1 of 1

SUMMARY:

BSUM(6)

A number of receptor proteins, each specific for one of several classes of cognate steroid hormones [e.g., **estrogens** (**estrogen receptor**), progesterones (progesterone **receptor**), glucocorticoid (glucocorticoid receptor), androgens (androgen receptor), aldosterones (mineralocorticoid receptor), vitamin D (vitamin D receptor)], retinoids (e.g., retinoic acid receptor) or. . .

SUMMARY:

BSUM(11)

A . . . growth hormone genes, responsive to glucocorticoids, estrogens and thyroid hormones; the transcriptional control units for mammalian prolactin genes and progesterone **receptor** genes, responsive to **estrogens**; the transcriptional control units for avian ovalbumin genes, responsive to progesterones; mammalian metallothionein gene transcriptional control units, responsive to glucocorticoids;. . .

DETDESC:

DETD(66)

wherein . . . least one previously identified member of the steroid/thyroid superfamily of receptors is e.g., glucocorticoid receptors (GR), thyroid receptors (TR), retinoic acid **receptors** (RAR), mineralocorticoid **receptor** (MR), **estrogen receptor** (ER), the **estrogen** related **receptors** (e.g., hERR1 or hERR2), retinoid X receptors (e.g., RXR.alpha., RXR.beta., RXR.delta.), vitamin D receptor (VDR), aldosterone receptor (AR), progesterone. . .

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(FILE 'USPAT' ENTERED AT 16:23:34 ON 14 MAY 1999)
L1 934 S ESTROGEN?(5A)RECEPTOR?
L2 181 S L1 AND CHIMER?
L3 24 S L2 AND ORPHAN?
L4 1 S 5696233/PN
L5 1 S L1 AND L4